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search message with a "pong". This second search message already contains the file name of the file which is being sought. If a communication component receives a second search message "query" but does not  
5 itself hold the sought file ready for interchange, it forwards this search message to other communication components in the network whose addresses it has ascertained by means of a "ping" method which has already been carried out in the past, for example. If  
10 the communication component can provide the desired file for interchange, however, then it responds to the second search message "query" with a second hit response "query hit", as a result of which the searching communication component can initiate the file transfer  
15 using commands defined in the Internet protocol.

When a client component requires the services of a server component of a particular type, there are often a plurality of server components of this type available  
20 in packet-switching networks. The client component stores a table which contains, arranged according to type, every accessible server component with its network address and the other information required for access. For each type of server component, one of these  
25 components is marked in the table as "default component", that is to say as that component which is contacted first. If this default component is not available or cannot provide the adequate service features, then the next communication component is  
30 selected from the stored table in a defined order and is contacted. This process is repeated until a suitable, sufficiently powerful server component which is available at this time has been found.

35 The known packet-switching communication networks have been found to have the drawback that various server components of the same type are always having to be

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contacted in succession in a previously defined order.

When

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Patent claims

1. A communication network (VoIP, ISDN), particularly a packet-switching communication network (VoIP),
  - 5 - having communication components (A1 - A4, B3 - B11) which have client and server functionalities, and
  - having search functions, associated with the client functionalities, for ascertaining the current addresses of those communication components (A1 - A4,
  - 10 B3 - B11) which allow the server functionalities to be used,in which information about the server functionalities of a communication component (A1 - A4, B3 - B11) can be retrieved and used directly by the client
- 15 functionalities of other communication components (A1 - A4, B1 - B11, C1 - C3).
2. The communication network as claimed in claim 1, characterized
  - 20 in that the communication network (VoIP) with the communication components (A1 - A4, B1 - B11) administers itself using the information ascertained by the search functions.
- 25 3. The communication network as claimed in claim 1 or 2, characterized
  - in that a search functionality may be present a plurality of times in the communication network (VoIP)
  - 30 and in a plurality of communication components (A1 - A4, B3 - B11).
4. The communication network as claimed in one of the preceding claims,
  - 35 characterized
    - in that when server functionalities are present a plurality of times state information is used to select one of these server functionalities for use.

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5. The communication network as claimed in claim 4,  
characterized  
in that the state information comprises the current  
5 utilization level of the server functionalities which  
are present a plurality of times and/or the costs for  
using them.
6. The communication network as claimed in one of the  
10 preceding claims,  
characterized  
in that a client functionality retrieves an  
authorization before using a server functionality.
- 15 7. The communication network as claimed in claim 6,  
characterized  
in that authorizations are managed by at least one  
server functionality.